DOCUMENT RESUME

ED 026 217 RE 001 362

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A Study of the Effect of Socioeconomic Factors on the School Achievement of Spanish-Speaking School Beginners.

Pub Date Apr 68

Note-8p.; Paper presented at International Reading Association conference, Boston, Mass., April 24-27, 1968.

EDRS Price MF-$0.25 HC-$0.50

Descriptors-*Academic Achievement, *Attendance, Family Income, Family Structure, *Grade 1, *Mexican Americans, Preschool Education, Sex Differences, *Socioeconomic Background

The following socioeconomic variables were investigated as significant predictors of school achievement for Spanish-speaking children: (1) occupation of mother or father (the major wage earner), (2) family size, (3) family organization, (4) sex of child, (5) preschool experience, and (6) attendance record. School achievement was determined with the Metropolitan Readiness Test, Form A. Data on first-grade subjects with Spanish surnames were collected from 16 elementary schools in San Antonio, Texas. Attendance data were collected for Negro, upper-class Anglo, and middle-class Anglo pupils. It was found that knowledge of the socioeconomic variables listed above contributed significantly to the prediction of achievement. When the variables were considered separately, significant relationships were found between the parent's occupation and achievement and between attendance and achievement. When attendance was analyzed in relation to the other variables, there was a significant correlation only with the parent's occupation. The Mexican-American group was inclined to attend more often than the Negro group and less often than the Anglo groups in the first grade. (WL)

ED026217.

A STUDY OF THE EFFECT OF SOCIOECONOMIC FACTORS ON THE SCHOOL ACHIEVEMENT OF SPANISH-SPEAKING SCHOOL BEGINNERS.

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IRA - BOSTON - 1968

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The purpose of this study was to describe and investigate certain socioeconomic factors related to school achievement of Spanish-speaking school beginners. As its major objective, this study attempted to investigate the following hypothesis:

The following socioeconomic variables are significant predictors of the child's school achievement:

1a Occupation of father or mother, if the major wage earner of the family, is a significant predictor of the child's school achievement.

1b Size of the family is a significant predictor of school achievement.

1c Family organization, nuclear or atypical, is a significant predictor of the child's school achievement.

1d Sex of a child is a significant predictor of school achievement.

1e Preschool experience is a significant predictor of school achievement.

1f The child's number of days of attendance in school is a significant predictor of school achievement.

School achievement was measured by the Metropolitan Readiness Test Form A.

An attempt was also made to determine the value of the socioeconomic variables mentioned above as predictors of attendance. A knowledge of some of the causes of absences (other than such causes as illness) should be valuable to the educator not only as a predictor of achievement, but also as an indicator of attitude toward school.

Holtzman and Moore in their study Tomorrow's Parents have stated:

> ...it is common knowledge among school administrators that regular school attendance is largely dependent upon motivation of children and youth by parents. Support in keeping children in school has to do with parents' academic achievement and overall attitudes toward education.

Margaret Mullin in her article "Personal and Situational Factors Associated with Perfect Attendance" had this to say:

> The student's interests, abilities, needs, and values, and his family's social and financial setting are involved in the decision to attend or not to attend.

Other authors (Spears and Pivnich, Riessman, Kvaraceus and Ulrich) have related absences to identifying the disadvantaged child, predicting juvenile delinquency and relating absences to attitudes and values.

As a further attempt to investigate in-depth the school attendance variable, a study was made of ethnic group membership as a predictor of school attendance. Ethnic group membership was identified as being Mexican-American, Negro, or Anglo. The concomitant variables of temperature and precipitation were used in varying degrees to study their effect on attendance of the three groups.

The design of the study called for the collection of data on first grade subjects from sixteen elementary schools in San Antonio, Texas. For hypotheses 1 and 2 (the determination of the value of certain socio-economic factors as predictors of school achievement and of attendance), data of pupils of Spanish-surname from twenty-eight first-grade classrooms in eight elementary schools were used. Twenty-four additional first-grade classrooms were used for hypothesis 3 (the correlation of ethnic group membership with attendance). From these twenty-four classrooms, data were gathered on Negro pupils in eight first grades, upper-class Anglos

in two first grades, middle-class Anglos in two first grades, and ten Mexican-American classrooms. All were located within the San Antonio (Texas) Independent School District.

The following data were collected on students for hypotheses 1 and 2:

(a) occupation of head of household; (b) number of family members; (c) family organization; (d) sex of the child; (e) aggregate attendance of each student; (f) scores of Metropolitan Readiness Tests, Form A; (g) scores of the Inter-American Test of General Ability; and (h) general intellectual ability derived from the Goodenough-Harris Drawing Test. For hypothesis 3, the following data were collected: (a) group membership, Negro, Spanish-surname, Anglo middle-class, or Anglo lower-class; (b) recorded daily temperature, and (c) recorded daily precipitation.

Two variables considered to be important but not available due to the political climate in San Antonio at the time of this study were the parents' educational level and family income. A description of the general importance of these two variables was obtained through the use of census data.

In order to more accurately comprehend the problems facing the Mexican-American a demographic description of the seriousness of the Mexican-American's socioeconomic condition is necessary. The Mexican-Americans are bound together not only by their common ancestry, but also by their deprivation. "America's best kept secret" is how the socio-economic plight of the Mexican-American has been described. In view of the amount of publicity given to such places as Appalachia, or to particular ethnic groups such as the Negro, this supposition seems realistic.

Until recently there has not been any well-supported federal government aid program specifically for the Mexican-American and certainly nothing comparable to that in Appalachia. The Mexican-American has not as yet had the luxury of being championed by any national organization. And yet, the person of Spanish-surname is generally living in a state of deprivation equal to or greater than that of the Negro or resident of Appalachia.

Of the total Spanish-surname population in the Southwest (Arizona, California, Colorado, New Mexico and Texas), more than one-third of the families exist on annual incomes of less than $3000. Texas has 51 per cent of its Spanish-surname population living on less than $3000 annually. Within the area in San Antonio encompassing the schools used in this study, almost 53 per cent of the Mexican-American families were existing on annual incomes of less than $3000. This is 3.6 times more people living in poverty than the national average. A further analysis of Mexican-American families living in the area under study indicates that 32.7 per cent were trying to exist on annual incomes of less than $2000; and 13.3 per cent on incomes of less than $1000 annually.

The education variable is of considerable importance, particularly when the very positive relationship between education, occupation, and income is considered. In the Southwest, the median number of school years completed for males of Spanish-surname (25 years and over) is 7.1. Within the same category, the Negro is 8.6 and the Anglo 12.0.

In the area within San Antonio used in this study, 49.8 per cent of those with Spanish-surname had less than a fifth-grade education. Over 20 per cent have had no formal education, i.e. no school years completed.

The general socioeconomic status of the Mexican-American is one of deprivation which in most areas rivals that of the Negro. In education, income, and occupation, the Mexican-American status is much lower than that of the Anglo. In education, particularly, it is lower than that of the Negro.

As with the Negro, the Mexican-American experiences the handicap of segregation. There is, however, the added handicap of having a native language other than English. The language factor and his extreme poverty place the Mexican-American child at a disadvantage in trying to cope with the middle-class, English-language-oriented school curriculum. Normally, the Negro is primarily handicapped by poverty and segregation. However, segregation hinders the Mexican-American not only from being able to be socially and economically assimilated into the dominant Anglo culture, but also from gaining a needed fluency in English.

The focus of this study was on the relationships between certain socioeconomic variables and the dependent variables of achievement and attendance. Although the results of the first year (1964-65) was computed from data on 584 pupils, complete socioeconomic data for this particular aspect of the study were available on only 305 pupils. Thus, 279 pupils had to be rejected because of incomplete data. However, for hypothesis 3 (the relationship between ethnic membership and school attendance), 722 students were used because of the addition of Negro and Anglo pupils.

When analysis was made of the data, it was determined that without using the variables of parent's occupation, family size and organization, pupil sex, preschool experience and attendance, and only using the variables of I.Q. and pretest, the prediction efficiency would be significantly decreased. Thus, it may be stated that the combination of the above

socioeconomic variables contribute significantly to the prediction of achievement. A further indication of the power of the above socioeconomic variables as predictors of achievement is that the correlation between these variables and achievement and the correlation between I.Q. and pretest scores and achievement were equally significant.

When the independent variables were considered separately the following relationships with achievement were indicated:

a. parent's occupation and the child's achievement; significant relationship. Significant correlations were also found between parent's occupation and certain subtests of the Metropolitan Readiness Test, i.e. listening, matching, alphabet, and numbers. Significant correlations were also found between parent's occupation and I.Q. and pretest scores.

b. family size and the child's achievement; no significant relationship.

c. family organization and the child's achievement; no significant relationship.

d. sex as a predictor of school achievement; no significant relationship.

e. preschool experience as a predictor of school achievement; no significant relationship. There was a significant relationship between preschool experience and pretest. The indication is that the advantage of a preschool experience does not carry through to the end of the year. Recent head start studies have indicated similar findings.

f. attendance as a predictor of school achievement; it was determined that there was a significant correlation between attendance and school achievement.

When analyzing the data for hypothesis 2 (the correlation between certain socioeconomic variables and school attendance) the only independent variable found to have a significant correlation with the criterion was family organization. The indication is that the more stable the family the better the school attendance of the child. Parent's occupation was the only other variable that came close to having a significant correlation.

In considering attendance patterns for the three ethnic groups, Mexican-American, Negro and Anglo (hypothesis 3), there was found to be a significant difference among their amount of attendance. The negative effect of adverse temperature and precipitation was apparent, particularly on the Mexican-American and Negro groups.

However, in considering attendance means without any concomitant variables (temperature and precipitation held constant), the difference between the Anglo group and the Mexican-American group was not significant. There was a significant difference between the Anglo and Negro groups, and the Mexican-American and Negro group. The supposition is that between the two minority groups, Mexican-American and Negro, both approximately equally deprived, the Mexican-American has a greater inclination to attend school, at least in the first grade. Yet, the Mexican-American has a lower median school years completed than the Negro. The generalization is that some handicap other than attitude hinders and deters the Mexican-American child from continuing his schooling.

Trying to compete in a situation using a language that is for most Mexican-Americans strange and incomprehensible, may be reason enough to drop out of school. Parental indifference and financial need may also be

influential. The need arises from a necessity for another wage earner, no matter how small the income.

When attempting to predict the child's school achievement, the teacher should be aware of the value of certain socioeconomic variables, which in most cases are readily available, as predictors of achievement. These variables can be as significant as readiness or I.Q. scores. When combined with I.Q. and readiness scores they become of increasing value.

Attitude is also of importance to the teacher. An indication of attitude can be had from attendance patterns of the child, particularly children who are classified as culturally disadvantaged.